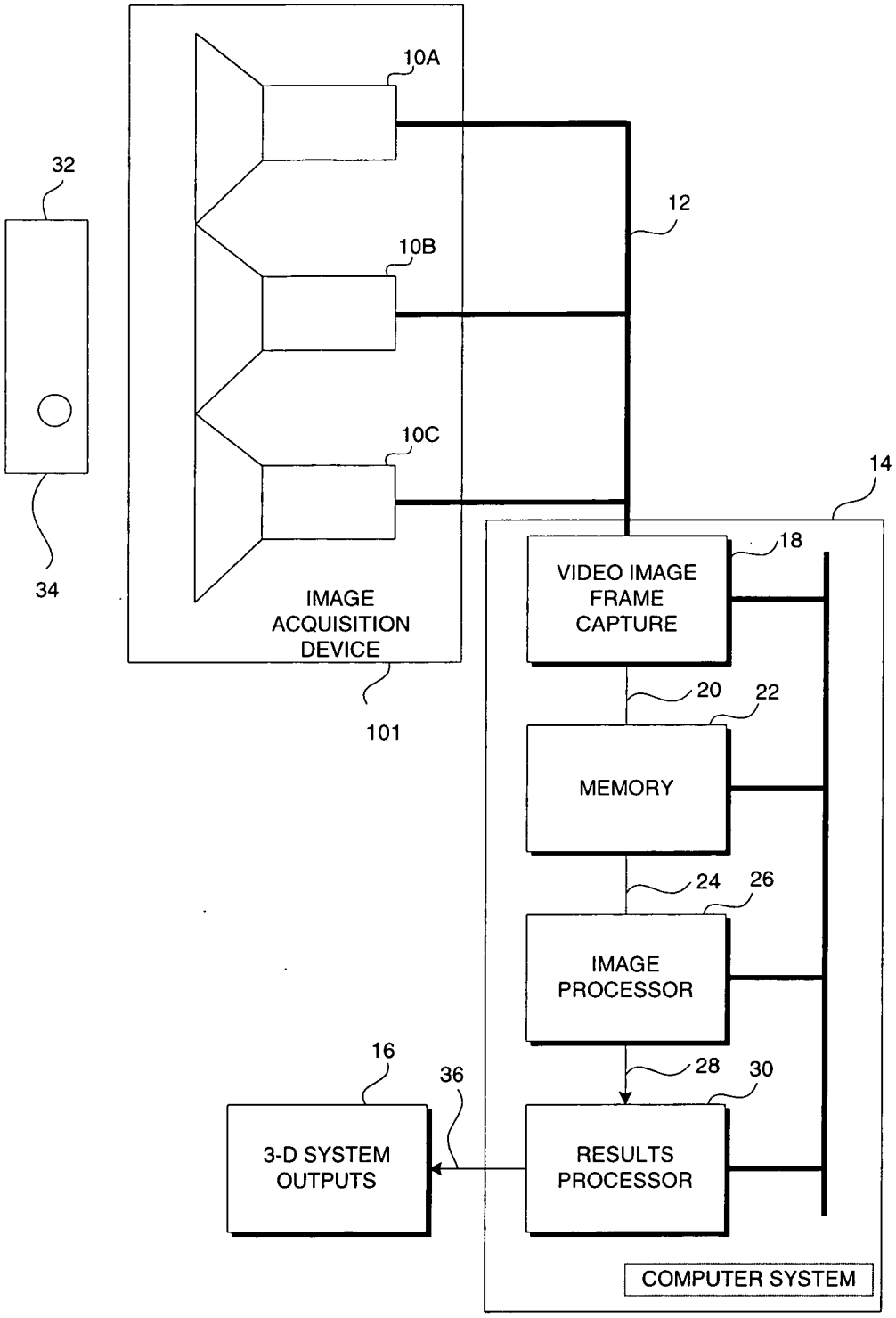

10A
32
12
10B
10C
14
18
VIDEO IMAGE FRAME CAPTURE
34
IMAGE ACQUISITION DEVICE
101
20
22
MEMORY
24
26
IMAGE PROCESSOR
16
36
28
30
3-D SYSTEM OUTPUTS
RESULTS PROCESSOR
COMPUTER SYSTEM

FIGURE 1

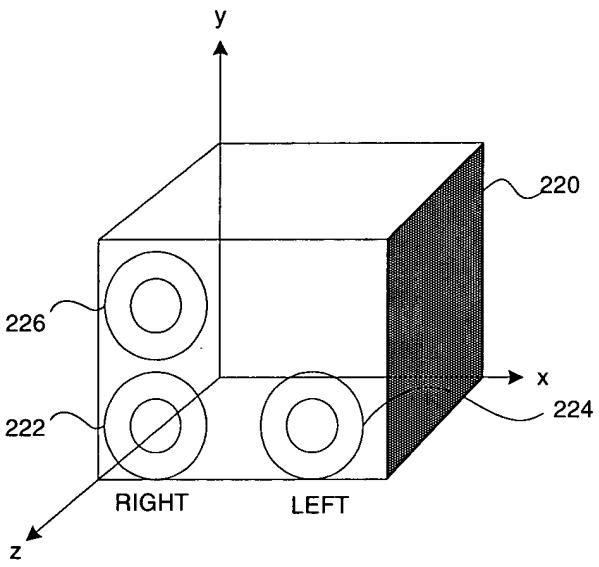
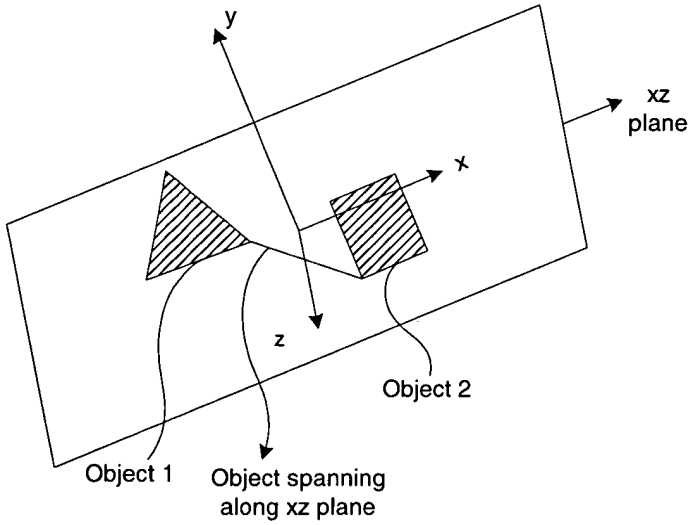

y
220
226
x
224
222
RIGHT
LEFT
z

FIGURE 2


y
xz
plane
x
z
Object 2
Object 1
Object spanning
along xz plane

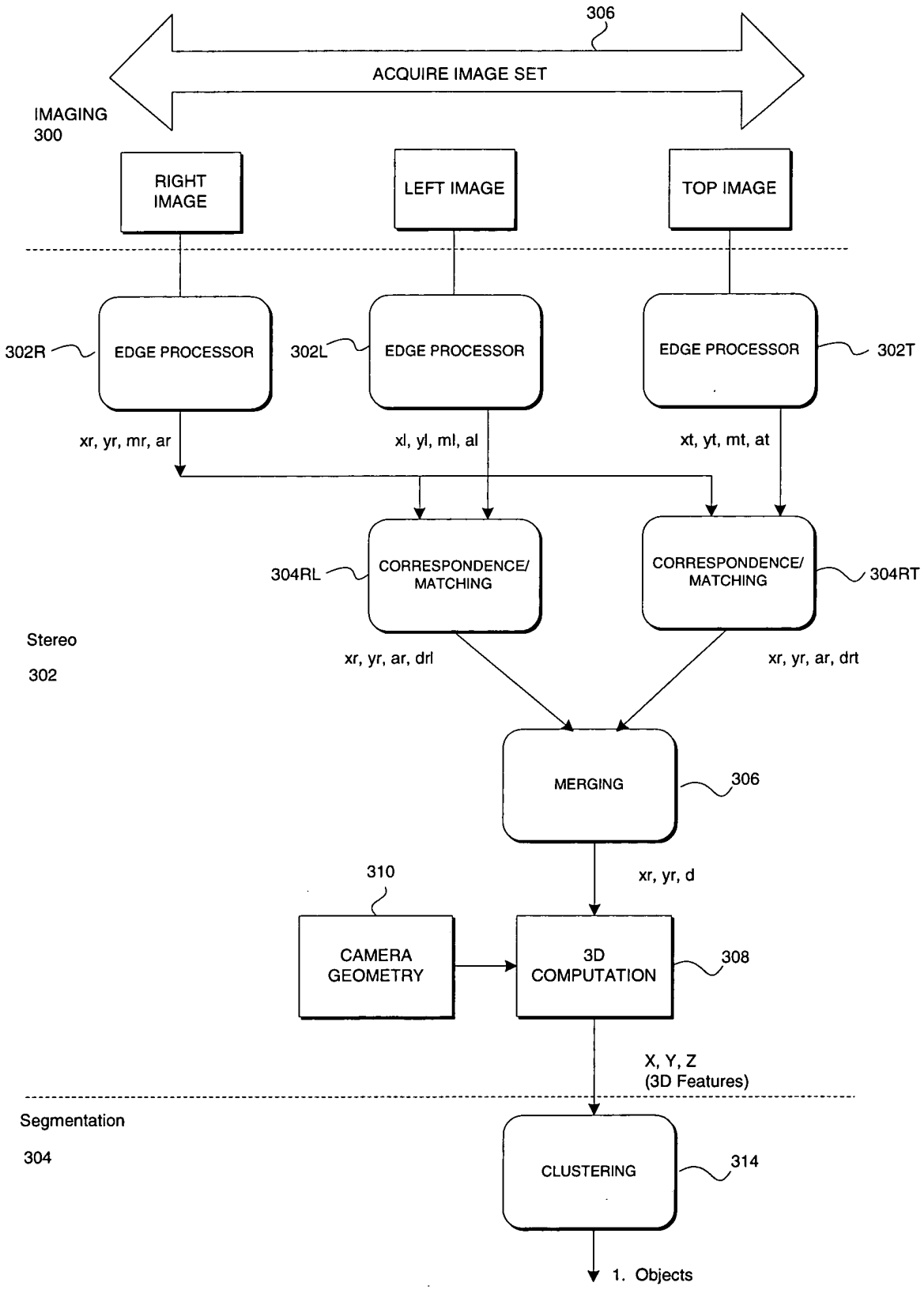

306
ACQUIRE IMAGE SET
IMAGING
300
RIGHT IMAGE
LEFT IMAGE
TOP IMAGE
302R
EDGE PROCESSOR
302L
EDGE PROCESSOR
EDGE PROCESSOR
302T
xr, yr, mr, ar
xl, yl, ml, al
xt, yt, mt, at
304RL
CORRESPONDENCE/ MATCHING
CORRESPONDENCE/ MATCHING
304RT
Stereo
302
xr, yr, ar, drl
xr, yr, ar, drt
MERGING
306
310
xr, yr, d
CAMERA GEOMETRY
3D COMPUTATION
308
X, Y, Z
(3D Features)
Segmentation
304
CLUSTERING
314
1. Objects

FIGURE 3